

Corrected sequence listing
SEQUENCE LISTING

<110> Consortium fuer elektrochemische Industrie GmbH

<120> Feedback-resistant Homoserine-Transsuccinylases

<130> CO-P#####

<140>

<141>

<160> 12

<170> PatentIn Ver. 2.0

<210> 1

<211> 930

<212> DNA

<213> Escherichia coli

<220>

<221> CDS

<222> (1)..(930)

<300>

<301> Blattner, F. R.

<302> The complete genome sequence of Escherichia coli K-12.

<303> Science

<304> 277

<305> 5331

<306> 1453-1474

<307> 1997

<400> 1

atg ccg att cgt gtg ccg gac gag cta ccc gcc gtc aat ttc ttg cgt	48
Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg	
1 5 10 15	
gaa gaa aac gtc ttt gtg atg aca act tct cgt gcg tct ggt cag gaa	96
Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu	
20 25 30	
att cgt cca ctt aag gtt ctg atc ctt aac ctg atg ccg aag aag att	144
Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile	
35 40 45	
gaa act gaa aat cag ttt ctg cgc ctg ctt tca aac tca cct ttg cag	192
Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln	
50 55 60	
gtc gat att cag ctg ttg cgc atc gat tcc cgt gaa tcg cgc aac acg	240
Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr	
65 70 75 80	
ccc gca gag cat ctg aac aac ttc tac tgt aac ttt gaa gat att cag	288
Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln	
85 90 95	
gat cag aac ttt gac ggt ttg att gta act ggt gcg ccg ctg ggc ctg	336
Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu	
100 105 110	
gtg gag ttt aat gat gtc gct tac tgg ccg cag atc aaa cag gtg ctg	384

Corrected sequence listing																
Val	Glu	Phe	Asn	Asp	Val	Ala	Tyr	Trp	Pro	Gln	Ile	Lys	Gln	Val	Leu	
		115					120					125				
gag	tgg	tcg	aaa	gat	cac	gtc	acc	tcg	acg	ctg	ttt	gtc	tgc	tgg	gcg	432
Glu	Trp	Ser	Lys	Asp	His	Val	Thr	Ser	Thr	Leu	Phe	Val	Cys	Trp	Ala	
	130					135					140					
gta	cag	gcc	gcg	ctc	aat	atc	ctc	tac	ggc	att	cct	aag	caa	act	cgc	480
Val	Gln	Ala	Ala	Leu	Asn	Ile	Leu	Tyr	Gly	Ile	Pro	Lys	Gln	Thr	Arg	
	145				150					155					160	
acc	gaa	aaa	ctc	tct	ggc	gtt	tac	gag	cat	cat	att	ctc	cat	cct	cat	528
Thr	Glu	Lys	Leu	Ser	Gly	Val	Tyr	Glu	His	His	Ile	Leu	His	Pro	His	
				165					170					175		
gcg	ctt	ctg	acg	cgt	ggc	ttt	gat	gat	tca	ttc	ctg	gca	ccg	cat	tcg	576
Ala	Leu	Leu	Thr	Arg	Gly	Phe	Asp	Asp	Ser	Phe	Leu	Ala	Pro	His	Ser	
			180					185					190			
cgc	tat	gct	gac	ttt	ccg	gca	gcg	ttg	att	cgt	gat	tac	acc	gat	ctg	624
Arg	Tyr	Ala	Asp	Phe	Pro	Ala	Ala	Leu	Ile	Arg	Asp	Tyr	Thr	Asp	Leu	
		195					200					205				
gaa	att	ctg	gca	gag	acg	gaa	gaa	ggg	gat	gca	tat	ctg	ttt	gcc	agt	672
Glu	Ile	Leu	Ala	Glu	Thr	Glu	Glu	Gly	Asp	Ala	Tyr	Leu	Phe	Ala	Ser	
	210					215					220					
aaa	gat	aag	cgc	att	gcc	ttt	gtg	acg	ggc	cat	ccc	gaa	tat	gat	gcg	720
Lys	Asp	Lys	Arg	Ile	Ala	Phe	Val	Thr	Gly	His	Pro	Glu	Tyr	Asp	Ala	
	225				230					235					240	
caa	acg	ctg	gcg	cag	gaa	ttt	ttc	cgc	gat	gtg	gaa	gcc	gga	cta	gac	768
Gln	Thr	Leu	Ala	Gln	Glu	Phe	Phe	Arg	Asp	Val	Glu	Ala	Gly	Leu	Asp	
				245					250					255		
ccg	gat	gta	ccg	tat	aac	tat	ttc	ccg	cac	aat	gat	ccg	caa	aat	aca	816
Pro	Asp	Val	Pro	Tyr	Asn	Tyr	Phe	Pro	His	Asn	Asp	Pro	Gln	Asn	Thr	
			260					265					270			
ccg	cga	gcg	agc	tgg	cgt	agt	cac	ggt	aat	tta	ctg	ttt	acc	aac	tgg	864
Pro	Arg	Ala	Ser	Trp	Arg	Ser	His	Gly	Asn	Leu	Leu	Phe	Thr	Asn	Trp	
		275					280					285				
ctc	aac	tat	tac	gtc	tac	cag	atc	acg	cca	tac	gat	cta	cgg	cac	atg	912
Leu	Asn	Tyr	Tyr	Val	Tyr	Gln	Ile	Thr	Pro	Tyr	Asp	Leu	Arg	His	Met	
	290					295					300					
aat	cca	acg	ctg	gat	taa											930
Asn	Pro	Thr	Leu	Asp												
	305															

<210> 2
 <211> 309
 <212> PRT
 <213> Escherichia coli

<400> 2
 Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
 1 5 10 15
 Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
 20 25 30

Corrected sequence listing

```

Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
      35              40              45
Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
      50              55              60
Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
      65              70              75              80
Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
      85              90              95
Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu
      100             105             110
Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
      115             120             125
Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
      130             135             140
Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
      145             150             155             160
Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
      165             170             175
Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
      180             185
Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
      195             200             205
Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
      210             215             220
Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
      225             230             235             240
Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
      245             250             255
Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
      260             265             270
Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
      275             280             285
Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
      290             295             300
Asn Pro Thr Leu Asp
305

```

<210> 3
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:

oligonucleotide	Corrected sequence listing metAfw	
<400> 3 gatcccatgg ctcttttag tcattcttat		30
<210> 4 <211> 36 <212> DNA <213> Artificial Sequence		
<220> <223> Description of Artificial Sequence: Oligonucleotide metArev		
<400> 4 gatcgagctc agtactatta atccagcgtt ggattc		36
<210> 5 <211> 33 <212> DNA <213> Artificial Sequence		
<220> <223> Description of Artificial Sequence: Oligonucleotide GAPDHfw		
<400> 5 gtcgacgcgt gaggcgagtc agtcgcgtaa tgc		33
<210> 6 <211> 42 n=1:1:1:1 mixture of A,T,C and G. <212> DNA <213> Artificial Sequence		
<220> <223> Description of Artificial Sequence: Oligonucleotide GAPDHrevII		
<400> 6 gaccttaatt aagatctcat atgttcacc agctatttgt ta		42
<210> 7 <211> 37 <212> DNA <213> Artificial Sequence		
<220> <223> Description of Artificial Sequence: Oligonucleotide metAfw2		
<400> 7 catggctcct tttagtcatt cttatattct aacgtag		37
<210> 8 <211> 47		

Corrected sequence listing

<212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Oligonucleotide
 metArev2
 <400> 8
 acgcgtatgc atccagagct cagtactatt aatccagcgt tggattc 47
 <210> 9
 <211> 25
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Oligonucleotide
 metAmutfw1
 <400> 9
 nnncagatca cgccatacga tctac 25
 <210> 10
 <211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Oligonucleotide
 metAmutrev1; N is a 1:1:1:1: mixture of A, T, C and G
 <400> 10
 gacgtaatag ttgagccagt tgg 23
 <210> 11
 <211> 24
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Oligonucleotide
 metAmutfw2
 <400> 11
 nnnggtttga ttgtaactgg tgcg 24
 <210> 12
 <211> 21
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Oligonucleotide

Corrected sequence listing
metAmutrev2 ; N is a 1:1:1:1: mixture of A, T, C and G

<400> 12

aaagttctga tcctgaatat c

21